

This listing of claims replaces all prior listings and versions of claims in this application.

Claims 1-13: cancelled.

14. A microcapsule comprising at least one polymerization initiator.
15. The microcapsule of claim 14, wherein the polymerization initiator is capable of initiating the polymerization of unsaturated polyester resins.
16. The microcapsule of claim 14, wherein the polymerization initiator is a free radical initiator.
17. The microcapsule of claim 14, wherein the polymerization initiator is a C-C-labile compound.
18. The microcapsule of claim 14, wherein the capsule shell of the microcapsule is designed in such a way that it decomposes at the curing temperature of the polymer composition to be cured.
19. The microcapsule of claim 14, wherein the capsule shell of the microcapsule comprises one or more organic polymers.
20. The microcapsule of claim 14, wherein the capsule shell of the microcapsule comprises polyurethanes, melamine resins, epoxy resins or mixtures thereof.
21. A process for the production of a microcapsule, comprising the steps of:
 - (a) preparing a solution containing a polymerization initiator used for the production of a capsule shell,
 - (b) preparing a solution containing an organic polymer and a polymerization initiator,
 - (c) mixing the solutions to form a mixture, and
 - (d) if necessary, processing the mixture to produce a powder.
22. The process of claim 21, wherein, in step (c), the solutions are mixed via stirring with one another to a droplet size ranging from 1 to 20 μm .

23. The process of claim 22, wherein the solutions are mixed to a droplet size ranging from 3 to 15 μm .
24. The process of claim 21, wherein the mixture obtained from step (c) is cooled and spray-dried in step (d).
25. A process for polymerizing a polyester resin, comprising the steps of:
- (a) introducing a polyester resin capable of being polymerized,
 - (b) polymerizing the polyester resin with a microcapsule comprising at least one polymerization initiator.
26. The process of claim 25, wherein said polyester resin is a casting resin or an impregnating resin.
27. The process of claim 25, wherein said polyester resin is a fiber-reinforced unsaturated polyester resin.